cleus, and the third branch. He thinks it may be of some value in localizing lesions at the base of the brain (Hirnstamme).

4. *Early Tabes.*—Bloch reports a case of tabes in a girl of seventeen years. Argyll-Robertson pupils, loss of reflexes, ataxia, bladder and sensory disturbances were present. Puberty had not yet developed. There was no history of syphilis in father or mother. The other children were healthy. Precordial distress, with palpitation and fear, occurred occasionally in this girl, and were considered by Bloch to be possibly "heart crises." McCarthy (Philadelphia).

### *Nouvelle Iconographie de la Salpêtrière.*

(1901, 14th year, No. 5, September-October.)

1. Pathological Anatomy of Hereditary Cerebellar Ataxia. Switalsky.
2. Researches Upon the Anatomical Structure of the Nervous System of an Anencephalus. N. Vaschide and Claude Vurpas.
3. A Case of Hysterical Breast. Lannois.
4. Paralysis of the Ulnar Nerve with Contractures Resulting (Main en Pince). Jacinto de Leon.
5. A Case of Ostitis Deformans of Paget, with Melanodermia. Autopsy. L. Hudelo and J. Heitz.
6. The Influence of the Work of One Muscle Upon the Activity of Other Muscles. Ch. Féré.

1. *Hereditary Cerebellar Ataxia.*—Pierre Marie first differentiated this disease from Friedreich's disease, with which it has many similarities. The author of this paper has had the opportunity of studying two cases in the service of Marie and of making a microscopic study of the nervous system in one of them. A careful clinical account of these cases has been published by Klippel and Durant in the *Revue de Médecine,* Oct., 1892. A résumé of the pathological findings in this case is the following: Degeneration of the fibers in the column of Goll, in the direct cerebellar tracts, in Gowers' tract. Atrophy of the grey substance of the cord with disappearance of the cells. In the medulla degeneration of the direct cerebellar tract and of Goll's column. A considerable atrophy of the direct cerebellar peduncular fibers, proliferation of the ependymal connective tissue of the fourth ventricle and of the aqueduct of Sylvius. In the cerebellum there was a diminution in the number of convolutions, and the fissures were very large. In the cortex there was found a non-stainable zone lying between the granular and molecular layer. Reduction in volume of the white substance. Atrophy of the right optic nerve. There is a disappearance of the large calibred fibers and a considerable augmentation of the small ones in the peripheral nerves and in the nerve roots. Hypoplasia of the blood vessels. The results of the anatomical study of these cases, as compared with the few cases found in literature show striking differences but, as a whole, the lesions are similar. The author formulates the following tentative theory to explain the pathogenesis of hereditary cerebellar ataxia: An individual who is to suffer with this disease, comes into the world with a weakened nervous and vascular system. This weakness is confined more or less sharply to the cerebellum and its nerve tracts. Up to a certain age there exist no symptoms referable to the nervous system because the vascular system, though below the normal, suffices for nutrition. At the moment when the fibers already weak become more rigid on account of age or some other cause, they can no longer nourish the nervous system.

The parts with power of resistence do not show any effect from the lowered nutrition, but the weakened parts do. In the beginning the symptoms seem to have but little significance; they are vertigo, fulness, etc., all however, pointing to their cerebellar origin. Later, the nervous system begins to react to the lessened nutrition and atrophies. This atrophy is shown in the beginning by diminution in volume of the fibers, which causes a lessening in volume of the cord, bulb, etc. At this stage, the symptoms become typical of the disease. If the patient dies at this time, we find a simple atrophy of the nervous system, as in the cases of Nonne and Fraser. If the condition persists, or if the vascular system is especially weak, the degeneration of nervous fibers results and extends not only to the cerebellum. but to the rest of the nervous system as well.

2. *Anatomy of Anencephalus.*—A careful microscopic study of the nervous structure of an anencephalus. This paper is a continuation of two former articles by the same author on the psychology of the vital acts of an infant with total absence of brain and the biological life of an anencephalus. The following conclusions are noted in a résumé of the physiological and anatomical data observed in this study: (1) Spontaneous movements or associated movements are possible in spite of the total absence of the pyramidal tract. The function of the pryramidal tract is inhibitory rather than dynamic; (2) the nerve-cells were found definitely degenerated throughout the whole extent of the nervous axis; the sensory-motor reaction was present; (3) in spite of the advanced state of degeneration found in the nerve-cells, the nerve-roots presented no lesion or evidence of degeneration; (4) in spite of the pathological condition of the nervous system and especially of the nerve-cells, the muscles were normal in form and in motility; (5) at the level of the quadrigeminal bodies two symmetrical nuclei were found composed of motor cells. As the third and fourth pair of motor nerves were missing, this might be the location of the superior facial nucleus; (6) in the cord behind the anterior commissure, crossed fibers going from one anterior horn to the other were observed. These fibers explain perhaps the synergical movements which took place in spite of the absence of long motor fibers; (7) the absence of the restiform bodies and the arciform fibers was explained by the absence of the cerebellum. The inferior and the para-olivary bodies were found wanting. This is a further proof of the intimate relation of the cerebellum with the cerebrum. (8) Dilatation of the ventricles and the continuation on each side of the ependymal elements with the adjacent tissues were noted; (9) increase in number of the neuroglia cells; (10) inflammatory process involving the nervous tissue, the meninges, and the blood vessels. This case can be considered as a natural experiment in physiology and it tends to prove that a rudimentary biological life exists which is independent of the functions of the superior nervous centers.

3. *Hysterical Breast.*—Clinical résumé: Woman aged forty-seven years; hysterical symptoms; convulsive attacks; globus, painful sensations, polyuria, pollakiuria, permanent stigmata as profound anesthesia of the right side, hyperesthetic zones over ovaries and breast, hysterical clavus, etc. For fifteen months without any appreciable cause, the breast has become the seat of painful sensations, cutting and burning in nature. At the same time, there was such a marked increase in its size that, in the belief that she was attacked by cancer, she entered the surgical division of the hospital for operation. The right breast was found to be enormously hypertrophied,

the left normal in size. The skin over both breasts is normal. Hysterical breast shows itself most commonly by symptoms of neuralgia, the so-called "mastodynia." Simple hypertrophy of the breast is always unilateral and is less common.

4. *Paralysis of Ulnar Nerve.*—Two cases of contracture following a paralysis of the ulnar nerve. In both cases a peculiar attitude of the hands was produced, which Dupuytren has described in connection with the retraction of the palmar fascia. The author calls this attitude "main en pince." Case I. Paralysis of the ulnar nerve following prolonged anesthesia for laparotomy. The left hand remained contracted. The first phalanges were in forced extension, the second and third in slight flexion; extension and flexion more accentuated in the fourth and fifth fingers. The fingers abducted, the tendons of the long extensors very prominent on the dorsal aspect. Movements of abduction and adduction abolished. Voluntary flexion of the fingers very feeble? Adduction of the hand abolished. It was impossible for the ends of the fingers to touch each other on account of the limitation of motion; this was especially marked in the ring and little fingers. Case II. A man, seventy-eight years old; thirty years before was struck with a bullet in the internal and inferior aspect of the arm. This produced a painful paralysis of the hand and finally led to the following condition of the fingers: The last three fingers in forcible flexion, the third phalanx upon the second, the second upon the first, and the three fingers upon the palm of the hand. This flexion was so forcible that the nails were driven into the skin. The thumb and index finger functionate normally, at least for flexion and extension. In the first case hysterical contraction was considered as a possible factor, but it was excluded. The article is illustrated by beautiful photographs.

5. *Ostitis Deformans.*—A report of the microscopic findings of the bones, viscera and nervous system of a case of ostitis deformans of Paget. The findings in the nervous system were not marked enough to attach to them any great importance in an etiological way. The paper is a very complete one, containing many excellent photographs of the bone lesions, as well as a full discussion of the cases in literature. An abstract of this paper from the neurological standpoint does not seem to be indicated.

6. *Influence of Muscular Work.*—No abstract of this article is practical, on account of the complicated mass of experimental data.

S. SCHWAB (St. Louis)

## MISCELLANY.

ACTION OF BACTERIAL POISONS ON PERIPHERAL NERVES. Dopter and Lafforgue. (Archives de Médecine Expérimentale, July, 1901.)

These authors have gone completely over this subject by the experimental inoculation of a large number of such substances. They employed diphtheria toxin, tuberculin, bacillus pyocyaneus, streptococcus, staphylococcus, pneumococcus, pneumobacillus and cholera and pest toxins. Soluble products of the colon bacillus gave practically no results. These various substances were inoculated locally around the peripheral nerves of guinea-pigs. Account was taken of the clinical symptoms produced and a microscopical examination of the nerves was made. They believe that inflammations of the peripheral nerves of infectious origin are due to the action of bacterial substances circulating in the peripheral bloodvessels. These penetrate by dialysis into the interior of the nerve